

March 10, 2022

Victor Douglas
Manager, Community Engagement and Policy

Bay Area Air Quality Management District
375 Beale St., Suite 600
San Francisco, CA 94105

Re: Comments on January 2022 Staff Report on Proposed Rule 13-5

Dear Mr. Douglas,

Thank you for the opportunity to comment on the proposed Rule 13-5 to reduce emissions from industrial hydrogen plants. Further changes to the rule will be required in order to enact the agency's stated commitments in a meaningful fashion. Please accept these abridged comments on the proposed rule.

The Air District Must Recommit to Pursue a Basin-Wide Methane Strategy

As you know, the Air District committed to pursue a Basin-Wide Methane Strategy in the April 2017 Clean Air Plan, adopted five years ago next month, and the agency has thus far failed at this commitment. Particularly given the passage of AB 398 a few months later, which caused the Air District to halt any regulatory action on CO₂ and left methane as the primary GHG under the agency's jurisdiction, it has been very difficult to understand the agency's lack of progress on controlling methane emissions in the intervening years. In that time, among other things:

- A proposed backstop rule on Significant Emissions was dropped.
- A proposed rule on Organic Materials Handling was combined with a proposed rule on Composting Operations, then dropped in favor of permitting changes, which themselves appear to be in limbo.
- A proposed rule on Landfills was declared the most important by an order of magnitude before being either shelved or dropped.
- A rule on Oil and Gas Extraction was passed over because of the "insignificant" emissions involved, while a single citizen with their own equipment was able to turn up a very significant leak of methane and other pollutants at the first well they visited (in unincorporated Contra Costa County) — which additionally had apparently been operating for years without even registering with CARB.

By any measure, this is a mess to show for the last five years of staff time on this matter. The status quo on GHGs in March 2022 makes a mockery out of the Regional Climate Protection Strategy laid out with much fanfare in the 2017 Clean Air Plan, which at this point seems to have only one non-voluntary plank left in it — the proposed Rule 13-5 on refinery hydrogen plants, which contains very significant shortcomings as drafted.

The agency appears very happy to have symposia on climate over the years but repeatedly shows it is apparently unwilling or unable to match its "walk" on climate with its talk. The Air District's inaction on reducing GHGs under its regulatory authority is deeply out of step with the scores of resolutions, policies, practices, and plans passed by the local and county governments of the Bay Area to attempt to address GHG emissions. To regain any credibility at all on addressing out-of-control climate pollution, the agency needs to step up its engagement by at least an order of magnitude. As of now, the Air District has failed to meet the moment it looked upon in 2017, and the lack of progress on GHG reduction in the five years since the Clean Air Plan was adopted denotes that clearly.

The Rule Must Continually Reduce Emissions and Lead to a Zero-Emission Standard

The draft rule currently sets an emission limit of 15 pounds per day and 300 parts per million by volume of total organic compounds (TOC). That may be a fine standard in perpetuity if 15 pounds per day of TOC were a safe thing to emit, however it is not: We know from IPCC studies and others that continuing to add one iota of methane to the existing amount of climate warming already banked in the atmosphere will cause additional irreparable harm and damage, to say nothing of the health impacts that the other organic compounds emitted from the hydrogen plant vents may have on neighboring communities.

Indeed, missing from this rule is any acknowledgment of the fact that we are already well *above* natural and safe levels of climate pollutants and that we need to be reducing emissions over time to net-zero — and then net-negative — in order to regain a safe and stable climate envelope for our species and others. To that end, this rule will be wholly ineffectual at addressing the remaining GHG pollution under the agency's jurisdiction unless it builds in a declining emission limit with a zero-emission endpoint.

Is it the Air District's vision that hydrogen plants will still be venting methane to the atmosphere in 2035? 2050? 2100? How does that square with the District's Vision for 2050 presented in the 2017 Clean Air Plan? It is not obligatory to produce hydrogen from fossil fuels using steam-methane reforming. As you know, the technology and processes already exist to produce zero-emission hydrogen through renewable-energy electrolysis.

As drafted, Rule 13-5 countenances unnecessary methane emissions from hydrogen plants in perpetuity, and that is unacceptable to the Bay Area public and the global climate. The final Rule 13-5 needs to contain a declining TOC emission limit, including a future effective date for a TOC emission limit of 5-10 pounds per day and a future effective date for an emission limit of 0 (i.e., clean hydrogen production).

The Alternative Compliance Option is Unwarranted and Must Be Removed

As drafted, the rule allows for an alternative compliance option to the TOC emission limit: a reduction in "the overall emissions of methane and other GHGs by 90 percent via an approach approved by the Air District" (Staff Report, p.1). This alternative is unwarranted for multiple reasons and must be removed from the final rule.

The fact that three of the five Bay Area refineries already meet the proposed TOC emission limit makes crystal clear that achievement of a lower emission limit has been regularly demonstrated in practice. The two facilities with high emissions must then be compelled to take feasible, effective, and affordable measures to meet the proposed emission limit — if not a lower limit more in line with the other three facilities' operations.

The analogous issue came up with respect to Rule 6-5 (to reduce refinery FCCU PM) in 2021, and the Board of Directors seemed to clearly agree that they wanted similar facilities held to the same emission standard. The proposed alternative compliance option still leaves two facilities operating with significantly higher emissions than its peers, and it effectively rewards the two high-emitting facilities for deferring improvements like the pressure-swing adsorption systems that the other three facilities already operate.

Based on the figures provided, a 90% reduction of emissions from hydrogen plant operations at Valero and PBF would not only result in emissions much higher than at the other three comparable facilities, but much, much higher than the proposed emission limit — not even in the same ballpark. Under what rubric is it reasonable to continue to allow such huge emissions of such a powerful climate pollutant? Again, emissions *well below* the proposed emission limit have already been demonstrated in practice at the other three facilities. Valero and PBF must achieve the same emission standard.

The Rule Must Utilize Proper Measurement of Emissions, Not Inventory Data

Air District pollution inventories are in some cases woefully, egregiously out of touch with reality, and methane is a fantastic example. After committing to the Basin-Wide Methane Strategy, the District did direct aerial measurements of methane from various sources and found that both refineries and landfills were emitting vastly more methane than had been accounted for. Refinery methane emissions were found to be 6-11 times higher than expected based on Air District inventory data, with one refinery showing levels 23 times higher. To the extent the District is relying on inventory data for its policy interventions, they are likely to be proportionally as far off from what is needed to achieve the desired policy outcome.

The reliance on fatally flawed inventory data makes the calculated facility baselines arbitrary and inaccurate, and this is yet another reason why a 90% reduction from “baseline,” as proposed in the alternative compliance option, is such an ineffective and insufficient intervention. As another example of the quality of inventory data, Table 1 (Staff Report, p.24) purports to convey that there were *no* methane emissions from hydrogen plants at almost any listed facility in almost any listed year. These self-reported numbers are not worth the paper they’re printed on, and your own staff’s research (e.g., refinery and landfill flyovers) makes that clear.

Refineries Must Not Be Allowed to Control Their Own Compliance Assessments

Meaningful and efficacious pollution standards must be based on measurements by publicly controlled and publicly accountable agencies, not polluters. A public accountability mechanism backed up by the Air District should not be grounded on the fossil fuel industry providing to the agency the ongoing emissions data that would indicate their own compliance with this rulemaking and others. Yet the proposed rule unfortunately proceeds along just such lines. Outsourcing or devolving your critical refinery monitoring and compliance work to the polluters themselves is an effective way to reduce staff time, but not emissions.

A self-monitored, self-reported rule is of very little worth. Drivers don’t self-report that their vehicle complies with emission regulations. Restaurants don’t self-monitor if they’re complying with food safety regulations. Gas stations don’t self-report whether their dispensers are properly calibrated.

Countless other regulations with relatively trivial impacts on health and well-being are monitored and enforced by public entities. Meanwhile, hydrogen plant methane emissions contribute to incredibly injurious impacts on health and life, and yet the District proposes to let the fox self-report whether all the chickens remain in the henhouse. Given the immense political power of the oil industry — with the Western States Petroleum Association the largest and most powerful lobbying organization in California, and with their having interfered in numerous local elections in the Bay Area, including multiple members of the Air District’s Board of Directors — it is particularly egregious to allow them to be the judge of their own regulatory compliance.

Conclusion

Thank you very much for your time and consideration. While the lead time before the final rule package is very short for meaningfully integrating any substantive public comment, the rule as proposed does need some changes. Given this is the first opportunity to comment on the specifics of the proposed rule, I hope staff will take public comments seriously rather than rush forward with a flawed product.

Sincerely,
Jed Holtzman, MEM